

REMARKS

Claims 1-21 were examined. Claims 1-5 and 9-18 were rejected, while claims 6-8 and 19-21 were noted to be allowable if rewritten in independent form. In this response to the above-identified Office Action, Applicant amends claim 11 but does not add or cancel any other claims. Reconsideration of the rejected claims in light of the following arguments is respectfully requested.

I. Claims Rejected Under 35 U.S.C. § 103(a)

The Examiner rejected claims 1-5 and 9-18 under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 5,758,075 issued to Graziano *et al.* ("Graziano") in view of U.S. Patent No. 5,845,152 issued to Anderson *et al.* ("Anderson"). For a claim to be unpatentable under 35 U.S.C. § 103(a) in view of one or more references, the references must teach each limitation of the rejected claim, and there must be some suggestion or motivation in the references or in the general knowledge of the art to combine the references. Applicant disagrees that the cited references teach every limitation of the rejected claims.

As to claim 1, that claim recites a method comprising selecting a first queue from at least three queues in a switch based on the cycle number of a cycle, flushing the first queue at the start of the cycle, receiving at least one isochronous packet over a bus during the cycle, and placing the packet in a second queue based on the cycle number. The Examiner finds support for many of these elements in *Graziano*. Without conceding that such support exists, Applicant considers the more readily apparent deficiencies in the supplemental reference.

The Examiner states that "*Graziano* does not ... explicitly teach selecting or placing the packet based on the cycle number of a cycle," but the information is said to be found in several specified portions of *Anderson*. However, Applicant has been unable to locate the necessary information in the cited portions specifically, or in the reference more generally. With regard to the cited portions, col. 4, lines 19-28 discuss fig. 3, which shows packets in two different contexts, DMA command packets and the contents of the FIFO in representative sequences. Channels A and B are queues of data packets, but the packets are placed in one or the other queue *by content* (*i.e.* all the packets on a particular queue pertain to the same multimedia stream), and not *by cycle*. Within each channel (or queue) the packets are sorted by cycle number. This arrangement is

different than placing a packet in a queue based on the cycle number: if the packets were placed by cycle number, then all the “cycle *N*” packets would be together in the same queue.

Anderson subsequently describes transferring packet data from the channel queues to the FIFO (another sort of queue) by cycle (see *Anderson*, col. 7, lines 45+), but this does not teach the missing information either. *Anderson* only has a single FIFO (see *Anderson*, col. 2, lines 45+, and elsewhere). The system attempts to load two cycles’ worth of isochronous data into the FIFO, so *Anderson* does teach a queue that contains data sorted by cycle number. However, because there is only one FIFO, there is no need to “select” it by cycle number, as claim 1 requires. Instead, the *data packets* are selected by cycle. In addition, of course, *Anderson*’s system strives to maintain a FIFO containing *two* cycles’ worth of data, while according to Applicant’s disclosure and claims, a queue would contain data from only *one* cycle. In addition, if *Anderson*’s FIFO contained only one cycle’s worth of data, then it would fail its stated purpose of having data ready to transmit if the device received authorization to transmit late in one cycle, and then early in the next cycle. (See *Anderson* col. 3, lines 8+ and col. 6, lines 38+.)

For at least the foregoing reasons, Applicant believes that *Graziano* and *Anderson* fail to teach every element of claim 1, and therefore respectfully requests that the Examiner withdraw the rejection of that claim.

As to claims 2-5, 9 and 10, those claims depend on claim 1, which was shown to be patentable over the references of record in the preceding discussion. For at least the reasons discussed above, Applicant respectfully requests that the rejections be withdrawn.

As to claim 11, that claim recites a system comprising means for storing data in queues, means for selecting appropriate queuing means for each set of incoming data based on a cycle number in which the set of data arrive, means for directing the set of incoming data to the appropriate queuing means; and means for flushing data from the queuing means at the start of a cycle. Thus, the claim includes an element already shown to be absent from the references of record: *Graziano* does not teach selecting or placing a packet based on the cycle number of a cycle, and *Anderson*’s alleged teaching of that point has already been addressed and refuted in the discussion of claim 1. For at least these reasons, Applicant believes that *Graziano* and *Anderson* fail to teach every

element of claim 11, and therefore respectfully requests that the Examiner withdraw the rejection of that claim.

As to claim 12, that claim depends on claim 11, which was shown to be patentable over the references of record in the preceding discussion. For at least the reasons discussed above, Applicant believes that claim 12 is also patentable, and respectfully requests that the rejection be withdrawn.

As to claim 13, that claim recites a switch comprising several elements, including a processor to direct incoming isochronous packets into one of the egress queues based on a cycle number of the switch and to flush another of the egress queues based on the cycle number. The deficiencies of the references of record with respect to directing incoming isochronous packets into one of the egress queues based on a cycle number have already been discussed above in the remarks about claims 1 and 11. However, as to flushing an egress queue based on the cycle number, Applicant observes that the flushing mentioned at *Graziano* column 36, lines 38+ is not in relation to *performing* the flush, but merely to *confirming* that a flush (or other data depletion) has occurred and that the FIFO is consequently empty. Applicant has been unable to locate an explicit "flush" operation in *Graziano*'s lengthy teaching, except for the implicit queue emptying that occurs when the system is initialized. In contrast, the current invention regularly flushes an egress queue based on the cycle number, at the start of each cycle.

For at least the reasons discussed, Applicant believes that *Graziano* and *Anderson* fail to teach every element of claim 13, and therefore respectfully requests that the Examiner withdraw the rejection of that claim.

As to claims 14-18, those claims depend directly or indirectly on claim 13, which was shown to be patentable over the references of record in the preceding discussion. For at least the reasons discussed above, Applicant believes that this group of was improperly rejected, and respectfully requests that the rejections be withdrawn.

II. Allowable Subject Matter

Applicant notes with appreciation that the Examiner indicated claims 6-8 and 19-21 contain allowable subject matter.

CONCLUSION

In view of the foregoing, it is believed that all claims now pending, namely claims 1-21, patentably define the subject invention over the prior art of record, and are in condition for allowance and such action is earnestly solicited at the earliest possible date. If the Examiner believes that a telephone conference would be useful in moving the application forward to allowance, the Examiner is encouraged to contact the undersigned at (310) 207-3800.

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Respectfully submitted,
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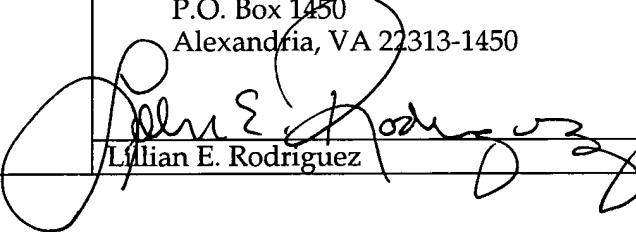
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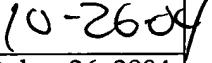
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